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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,771	07/15/2003	Jutta Barlage	004501-732	6028
21839	7590	04/24/2006	EXAMINER	
BUCHANAN INGERSOLL PC (INCLUDING BURNS, DOANE, SWECKER & MATHIS) POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			WILLOUGHBY, TERRENCE RONIQUE	
			ART UNIT	PAPER NUMBER
			2836	

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Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary	Application No. 10/618,771	Applicant(s) BARLAGE ET AL.	
	Examiner Terrence R. Willoughby	Art Unit 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/30/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☒ Claim(s) 16 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant amendment filed on 1/30/06 has been entered. Accordingly claims 1 and 12-15 are amended and no claims have been cancelled. No new claims were added. It also included remarks/arguments.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-5, 9-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Schmidt et al. (US 6,594,133).

Regarding claim 1, Schmidt et al. discloses a pluggable electrical apparatus (Fig. 1) in particular a surge arrester, with an axially symmetrically formed housing (10) with a housing axis running in the plugging direction (Abstract, lines 1-3), a flange for fastening the apparatus housing on a housing of a high-voltage installation (Column 2, lines 16-19) and with an axially symmetrical active part (Abstract, lines 4-5) with an axially routed circuit (Abstract, line 14), including a plug-in contact (Fig. 1, numeral 5), a grounding terminal (6) (Column 1, lines 8-9 and 31) and a non-linear resistance element (9) (Column 3, lines 5-6) connected in between, and with an axially symmetrical insulator (13) (Column 3, lines 35-36), which forms an insulating cone and surrounds the non-linear resistance element (Fig. 1, numeral 9) and an electrical connection (Fig. 1,

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through elements 3 and 6) with respect to the plug-in contact (Fig. 1, numeral 5), wherein the flange for fastening is formed into the apparatus housing (Column 2, lines 12-19), the apparatus housing being electrically conductive (Column 1, lines 38-41), and wherein the active part is mounted displaceable in the axial direction in the apparatus housing and held with a prestressing force (Fig. 1, through spring 18) with respect to the apparatus housing before a plug-in connection is formed.

Regarding claim 2, Schmidt et al. discloses the apparatus as claimed in claim 1, wherein the insulator is provided with an electrically conductive layer (Column 3, lines 43-45).

Regarding claim 3, Schmidt et al. discloses the apparatus as claimed in claim 2, wherein an end of the insulating cone (Fig. 1, numeral 13) remote from the plug-in contact (Fig. 1, numeral 5) is configured as an undercut and bears an inwardly disposed (Fig. 1, numeral 16), rounded portion (Fig. 1, numeral 15) of the electrically conductive layer.

Regarding claim 4, Schmidt et al. discloses the apparatus as claimed in 1, wherein the non-linear resistance element (Fig. 1, numeral 9) is given a rounded form on the plug-in contact side (Fig. 1, numeral 5).

Regarding claim 5, Schmidt et al. discloses the apparatus as claimed in claim 4, wherein the insulator (Fig. 1, numeral 13) is given a rounded configuration, at least on the plug-in contact side (Fig. 1, numeral 5).

Regarding claim 9, Schmidt et al. discloses the apparatus as claimed in one of claims 1, in which the grounding terminal (Fig. 1, numeral 6) is fastened to a groundable

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end of the active part (Fig. 1, numeral 8) and led through a base (Fig. 1, numeral 11) of the apparatus housing (Fig. 1 numeral 10), wherein a prestressed compression spring (Fig. 1, numeral 18), and the compression spring arranged between the groundable end and the base of the apparatus housing.

Regarding claim 10, Schmidt et al. discloses the apparatus as claimed in claim 9, in which a thread is formed into an end of the grounding terminal led out of the apparatus housing (Fig. 1, numeral 10) wherein the thread serves for receiving a clamping nut (Fig. 1, numeral 12) in the grounding terminal (Fig. 1, numeral 11) has a thread-free portion (Fig. 1, numeral 6) which is led out from the apparatus housing and serves for mounting of a securing sleeve (11) which can be provided between the clamping nut and the base of the apparatus housing.

Regarding claim 11, Schmidt et al. discloses the apparatus as claimed in claim 9, wherein an bearing sleeve (Fig. 1, numeral 13), which is axially aligned and encloses the grounding terminal (Column 2, line 67 and Column 3, line 1) is formed into a base of the apparatus housing (Fig. 1, 10), with a lateral surface serving for guiding (Column 2, lines 12-20) the compression spring (Fig. 1, numeral 18).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt et al. (US 6,594,133) and Rudy (US 5,684,665).

Regarding claim 6, Schmidt et al. discloses the apparatus as claimed in claim 1, but lacks an opening formed into a lateral surface of the apparatus housing. Schmidt et al. discloses a pressure-resistant apparatus formed in a shape of a bottle with an overpressure value (Column 2, lines 21-30).

However, Rudy discloses using an opening formed into a lateral surface of the apparatus housing (Column 1, lines 45-48). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide openings into the lateral surface of the apparatus housing taught by Rudy to help ventilate hazardous gases within the apparatus taught by Schmidt et al. when partial discharges occur on the active part.

Regarding claim 7, Schmidt et al. in view of Rudy discloses the apparatus as claimed in claim 6. Rudy discloses the openings (Fig. 1, numeral 28). Schmidt et al. discloses the insulator (Fig. 1, numeral 13), which comprises the end of the non-linear resistance element (Fig. 1, numeral 9) and plug-in contact (Fig. 1, numeral 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the openings so that it is positioned opposite a region of the insulator, which comprises the end of the non-linear resistance element on the plug-in contact side so too effectively dissipate the gas.

Regarding claim 8, Schmidt et al. in view of Rudy discloses the apparatus as

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claimed in claim 6. Schmidt et al. discloses the apparatus housing is formed as a cylinder (Abstract, lines 12-17). Rudy discloses at least two openings arranged offset with respect to each other in the circumferential direction of the cylinder (Fig. 1, numeral 28) and (Column 7, lines 48-53).

4. Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable by Schmidt et al. (US 6,594,133) and in view of Greuter et al. (US 6,678,139).

Regarding claim 12, Schmidt et al. discloses the apparatus as claimed in claim 1, with a fastening means for the electrical apparatus provided on a housing of the installation (Column 4, lines 15-21), but lacks a mating plug-in contact and a mating insulating cone, in which installation, after plugging together, the fastening means of the installation housing and the flange for fastening the apparatus housing are rigidly connected and the insulating cone and the mating insulating cone are pressed against each other without a gap.

However, Greuter et al. discloses an mating plug-in contact and a mating insulating cone, in which installation (Column 6, lines 62-65), after plugging together, the fastening means of the installation housing and the fastening means of the electrical apparatus are rigidly connected and the insulating cone and the mating insulating cone (Fig. (7a), numerals 18 and 5) are pressed against each other. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the fastening means with the installation housing and electrical apparatus of Schmidt et

al. by providing a mating plug-in contact and a mating insulating cone to reduce the dimension of one flange to the dimensions of the other flange.

Regarding claim 13, Schmidt et al. in view of Greuter et al. discloses the installation as claimed in claim 12. Schmidt et al. discloses the installation, wherein an adapter flange (Fig. 1, numeral 17), but does not disclose that the adapter flange is arranged between the flange for fastening (Column ,lines 12-19) the apparatus housing and a mating flange of the installation housing.

However, Greuter et al. discloses an apparatus bushing of an electrical apparatus connected to the electrical conductor in a plug connection with an adapter and mating flange (Fig. 7a, 7b, and 7c) of the installation housing (Column 5,lines 3-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schmidt et al. apparatus by providing an adapter and mating flange taught by Greuter et al. arranged between the flange for fastening the apparatus housing and a mating flange of the installation housing in order to compensate for different dimensions of the fastening means of the apparatus housing and the installation housing.

Regarding claim 14, Schmidt et al. in view of Greuter et al. discloses the installation as claimed in claim 12. Schmidt et al. discloses the apparatus housing (Fig. 1, numeral 10) and the installation housing (Fig. 1, numeral 19) are given an electrically conductive form (Column 3, lines 54-57), and in that the apparatus housing is grounded via the flange for fastening the apparatus housing and the installation housing (Column 3, lines 29-31).

Regarding claim 15, Schmidt et al. in view of Greuter et al. discloses a method for producing the high-voltage installation as claimed in claim 12. Schmidt et al. discloses the flange for fastening apparatus housing is fixed on the fastening means of the high-voltage installation (Column 4, lines 7-14), and in that, after that, the active part of the electrical apparatus is led into the installation housing, with the prestressing force being reduced (Column 1, lines 12-18), with an electrical plug-in connection of the plug-in-contact (Fig. 1, numeral 5) and with a gap-free spacing (Column 2, lines 31-37). Greuter et al. discloses a mating plug-in contact (Column 5, lines 3-4) for the fastening means in the electrical apparatus.

Allowable Subject Matter

5. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Combined claim 16 would be allowable over the art of record because the prior art does not teach a marking for checking a position of the active part in the housed electrical apparatus as set forth in the claimed invention.

Claim 17 is objected to as being dependent upon a rejected base claim 15, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Combined claim 17 would be allowable over the art of record because the prior

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art does not teach the securing sleeve being removed after the plug-in connection has been formed as set forth in the claimed invention.

Response to Amendment

Applicant argues, Schmidt et al. patent (US 6,594,133) does not teach or suggest, among other features that "the flange for fastening is formed into the apparatus housing, the apparatus housing being electrically conductive, and wherein the active part is mounted displaceably in the axial direction in the apparatus housing and held with a prestressing force with respect to the apparatus housing before a plug-in connection is formed".

However, the phrase, " the flange for fastening is formed into the apparatus housing" has extremely broad claim language. Schmidt et al. as shown in (Fig. 1), discloses an expanded area (16) and an expanding housing section (15) that forms the adjacent housing section (14) in the form of a bottle neck, which has a flange (17) located on the narrow neck of the housing section (14) and between the expanded area (16) and the expanding housing section (15) of the housing section (14). Schmidt et al. also discloses the apparatus housing being electrically conductive (column 1, lines 38-41), with an axially symmetrical active part (abstract, lines 1-3) that is held with a prestressing force (Fig. 1, through spring 18) with respect to the apparatus housing before a plug-in connection is formed, and therefore meets all the claim limitations that are recited in claim 1.

Applicant argues, Rudy patent (US 5,684,665) teaches away from the insulating housing being electrically conductive, and the active part being mounted displaceably in the axial direction.

However, Rudy patent wasn't relied upon for the teachings of the insulating housing being electrically conductive, and wherein the active part is mounted displaceably in the axial direction in the apparatus housing. Schmidt et al. patent disclosed above was relied upon for those teachings. Rudy patent was relied upon for the teachings of using the openings (column 1, lines 45-48), which were formed into a lateral surface of surge protector or arrester to help ventilate hazardous gases within the apparatus of Schmidt et al. Rudy patent discloses a modular electrical assembly (52), enclosed in a polymeric (i.e. an electrically conductive material), elastomeric weathershed housing (58) including a plurality of conductive electrical components aligned in a column along an axis and electrically connected at axially directed ends.

Applicant argues, Greuter et al. patent (US 6,678,139) does not relate to the pluggable electrical apparatus as claimed.

However, Greuter discloses a pluggable electrical apparatus (abstract), such as a surge arrester that is integrated in the bushing by using a mating plug-in contact and a mating insulating cone (Fig. (7a), numerals 18 and 5) forming an electrical connection (column 6, lines 62-65). Schmidt et al. patent discloses a pluggable electrical apparatus (Fig. 1), with an expanded area (16) and a expanding housing section (15) that forms the adjacent housing section (14) in the form of a bottle neck, which has a flange (17) located on the narrow neck of the housing section (14) and between the expanded area

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(16) and the expanding housing section (15) of the housing section (14). Schmidt et al. also discloses the apparatus housing being electrically conductive (column 1, lines 38-41), with an axially symmetrical active part (abstract, lines 1-3) that is held with a prestressing force (Fig. 1, through spring 18) with respect to the apparatus housing before a plug-in connection is formed, and therefore meets all the claim limitations that are recited in claim 1.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

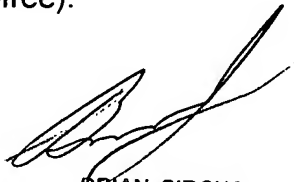
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrence R. Willoughby whose telephone number is 571-272-2725. The examiner can normally be reached on 8-5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TRW
4/11/06



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